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## NOTICE OF ALLOWANCE AND FEE(S) DUE

8791 7590 05/16/2008

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EXAMINER

BLAIR, DOUGLAS B

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 05/16/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/811,129

03/16/2001

Kingsum Chow

42390P10466

6517

TITLE OF INVENTION: GEOGRAPHIC LOCATION DETERMINATION INCLUDING INSPECTION OF NETWORK ADDRESS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	08/18/2008

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
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or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

8791 7590 05/16/2008

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## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/811,129 03/16/2001 Kingsum Chow 42390P10466 6517

TITLE OF INVENTION: GEOGRAPHIC LOCATION DETERMINATION INCLUDING INSPECTION OF NETWORK ADDRESS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1440 \$300 \$0 \$1740 08/18/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
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BLAIR, DOUGLAS B 2142 709-227000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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8791	7590	05/16/2008	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			BLAIR, DOUGLAS B	
			ART UNIT	PAPER NUMBER
			2142	
DATE MAILED: 05/16/2008				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 696 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 696 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability**

Application No.

09/811,129

Examiner

DOUGLAS B. BLAIR

Applicant(s)

CHOW ET AL.

Art Unit

2142

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received on 2/14/2008.
2. ☒ The allowed claim(s) is/are 1-8,10-16,18-25,27-33,35-38 and 40-50.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_.

/Douglas B Blair/  
Primary Examiner, Art Unit 2142

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joni Stutman-Horn (Reg. No. 42,173) on 3/20/2008.

The application has been amended as follows:

Amendments to the Claims

1. (previously amended) A method for geographic location determination based at least in part on inspection of a network address of a client, the method comprising:
  - performing a trace route between a server and the address of the client, the trace route identifying at least one domain name in a route between the server and the client;
  - identifying a construction format for the domain name, wherein the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;
  - identifying a geographically significant component of the domain name;
  - determining a geographic location for the domain name based at least in part on the geographically significant component;
  - determining a possible geographic location of the client based on a geographically significant component of a text based network address corresponding to the client network address; and
  - validating the possible geographic location of the client using the determined geographical location of the domain name identified in the trace route, the validating returning a validated geographic location of the client.
2. (original) The method of claim 1, further comprising:
  - analyzing domain names associated with a network access provider so as to identify the construction formats for said domain names;
  - identifying geographically significant components of said construction components; and
  - storing cross-references between said geographically significant components and geographic locations in a storage.

3. (previously amended) The method of claim 1, wherein the validating further comprises:

performing a first geographic location determination for the network address based on a determined geographical location for the domain name returned in the trace route;

performing at least one alternate geographic determination for the network address based on at least one additional determined geographic location for at least one additional domain name returned from the trace route; and

selecting a validated geographic location of the client from either the first geographic location determination or one of the at least one additional determined geographic location determinations.

4. (previously amended) The method of claim 3, wherein the selecting further comprises:

ranking said determined geographic locations in accordance with the number of alternate geographic location determinations consistent with said determined geographic locations.

5. (original) The method of claim 1, further comprising:  
providing a regular expression corresponding to the construction format;  
matching the regular expression against the domain name; and  
identifying a geographically significant portion of the regular expression so as to facilitate said identifying the geographically significant component of the domain name.

6. (original) The method of claim 1, wherein said performing the trace route is performed from the server to the client.

7. (original) The method of claim 1, wherein said performing the trace route is performed from the client to the server.

8. (previously amended) A method for determining a geographic location for a network address, comprising:

receiving a trace route comprising first and second network host identifiers for hosts disposed between a server and a client on a network;

matching the first network host identifier to a first template;

first parsing the first network host identifier according to the first template to determine a first geographically significant component, wherein the geographically significant component is derived from a construction format of the network host identifier, the network host identifier comprising a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;

identifying an estimated geographic location for the client based at least in part on said first parsing;

matching the second network host identifier to a second template;

second parsing the second network host identifier according to the second template to determine a second geographically significant component; and

revising said estimated geographic location based at least in part on said second parsing.

9. (canceled)

10. (original) The method of claim 8, further comprising:

revising said estimated geographic location based at least in part on a client profile associated with the client.

11. (original) The method of claim 10, further comprising:

said client contacting the server with the web browser, said browser providing the client profile to the server.

12. (original) The method of claim 10, wherein the client profile is based at least in part on a customer database identifying the client.



13. (original) The method of claim 10, wherein the client profile is based at least in part on a mass-marketing database identifying the client.

14. (previously amended) A method of determining a geographic location, comprising:

creating a log comprising network addresses of clients that have communicated with a web server;

filtering the log so as to remove undesirable network addresses;

asynchronously performing a trace route between a first one of said filtered network addresses and the server regardless of whether a previous geographic location for the first one of said filtered network addresses had been determined;

analyzing a result of said asynchronous performed trace route to ascertain a geographically significant component of at least one network address between a first one of said filtered network addresses and the server; wherein the geographically significant component is derived from a construction format of the network address, where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned; and

determining a geographic location for said first one responsive to said analyzing.

15. (original) The method of claim 14, further comprising:

generating a report comprising geographic locations for clients that have communicated with the web server.

16. (original) The method of claim 14, wherein said determining the geographic location comprises:

matching the result against a template identifying geographically significant portions of network addresses formatted in compliance with the template.

17. (canceled)

18. (previously amended) A computer readable storage medium having instructions stored thereon for geographic location determination based at least in part on inspection of a network address of a client, the instructions when executed on a machine, cause the machine to:

perform a trace route between a server and the address of the client, the trace route identifying at least one domain name in a route between the server and the client;

identify a construction format for the domain name, wherein the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;

identify a geographically significant component of the domain name;

determine a geographic location for the domain name based at least in part on the geographically significant component;

determine a possible geographic location of the client based on a geographically significant component of a text based network address corresponding to the client network address; and

validate the possible geographic location of the client using the determined geographical location of the domain name identified in the trace route, the validating returning a validated geographic location of the client.

19. (previously amended) The storage medium of claim 18, said instructions including further instructions capable of directing the processor to perform:

analyzing domain names associated with a network access provider so as to identify the construction formats for said domain names;

identifying geographically significant components of said construction components; and

storing cross-references between said geographically significant components and geographic locations in a storage.

Art Unit: 2142

20. (previously amended) The storage medium of claim 18, said instructions for validating include further instructions capable of directing the processor to perform:

performing a first geographic location determination for the network address based on a determined geographical location for the domain name returned in the trace route;

performing at least one alternate geographic determination for the network address based on at least one alternate determined geographic location for at least one additional domain name returned from the trace route; and

selecting a validated geographic location of the client from either the first geographic location determination or one of the at least one alternate determined geographic location determinations.

21. (previously amended) The storage medium of claim 20, wherein the selecting includes further instructions capable of directing the processor to perform:

ranking said determined geographic locations in accordance with the number of alternate geographic location determinations consistent with said determined geographic locations.

22. (previously amended) The storage medium of claim 18, said instructions including further instructions capable of directing the processor to perform:

providing a regular expression corresponding to the construction format;

matching the regular expression against the domain name; and

identifying a geographically significant portion of the regular expression so as to facilitate said identifying the geographically significant component of the domain name.

23. (previously amended) The storage medium of claim 18, wherein said performing the trace route is performed from the server to the client.

24. (previously amended) The storage medium of claim 18, wherein said performing the trace route is performed from the client to the server.

25. (previously amended) A computer readable storage medium having instructions stored thereon for determining a geographic location for a network address, the instructions when executed on a machine, cause the machine to:

receive a trace route comprising first and second network host identifiers for hosts disposed between a server and a client on a network;

match the first network host identifier to a first template;

first parse the first network host identifier according to the first template to determine a first geographically significant component; wherein the geographically significant component is derived from a construction format of the network host identifier, where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network host, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network host is assigned;

identify an estimated geographic location for the client based at least in part on said first parsing;

match the second network host identifier to a second template;

second parse the second network host identifier according to the second template to determine a second geographically significant component; and

revise said estimated geographic location based at least in part on said second parsing.

26. (canceled)

27. (previously amended) The storage medium of claim 25, said instructions including further instructions capable of directing the processor to perform:

revising said estimated geographic location based at least in part on a client profile associated with the client.

28. (previously amended) The storage medium of claim 27, said instructions including further instructions capable of directing the processor to perform:

said client contacting the server with the web browser, said browser providing the client profile to the server.

29. (previously amended) The storage medium of claim 27, wherein the client profile is based at least in part on a customer database identifying the client.

30. (previously amended) The storage medium of claim 27, wherein the client profile is based at least in part on a mass-marketing database identifying the client.

31. (currently amended) A computer readable ~~An~~ storage medium having instructions stored thereon for determining a geographic location, the instructions when executed on a processor, cause the processor to:

creating a log comprising network addresses of clients that have communicated with a web server;

filtering the log so as to remove undesirable network addresses;

asynchronously performing a trace route between a first one of said filtered network addresses and the server regardless of whether a previous geographic location for the first one of said filtered network addresses had been determined;

analyzing a result of said asynchronous performed trace route to ascertain a geographically significant component of at least one network address between a first one of said filtered network addresses and the server; wherein the geographically significant component is derived from a construction format of the network address, where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned; and

determining a geographic location for said first one responsive to said analyzing.

32. (previously amended) The storage medium of claim 31, said instructions including further instructions capable of directing the processor to perform:

generating a report comprising geographic locations for clients that have communicated with the web server.

33. (previously amended) The storage medium of claim 31, wherein said instructions for determining the geographic location comprises instructions for:

matching the result against a template identifying geographically significant portions of network addresses formatted in compliance with the template.

34. (canceled)

35. (currently amended) An apparatus for geographic location determination based at least in part on inspection of a network address of a client, the apparatus comprising:

a network comprising a plurality of devices, the devices including a plurality of client nodes;

a server communicatively coupled to the a network, ~~wherein a plurality of client nodes reside on the network;~~

performing means coupled to at least one of the server and client for performing a trace route between ~~a~~ the server and the address of a client being one of the plurality of client nodes, the trace route identifying at least one domain name in a route between the server and the client;

identifying means coupled to the server for identifying a construction format for the domain name;

identifying means coupled to the server for identifying a geographically significant component of the domain name; ~~and~~

determining means coupled to the server for determining a geographic location for the domain name based at least in part on the geographically significant component; wherein the geographically significant component is derived from a construction format of the domain name, where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;

determining means coupled to the server for determining a possible geographic location of the client based on a geographically significant component of a text based network address corresponding to the client network address; and

validating means coupled to the server for validating the possible geographic location of the client using the determined geographical location of the domain name identified in the trace route, the validating means to return a validated geographic location of the client and store the validated geographical location of the domain name in a database residing on a storage device coupled to the server.

36. (previously amended) The apparatus of claim 35, further comprising:

analyzing means coupled to the server for analyzing domain names associated with a network access provider so as to identify the construction formats for said domain names;

identifying means coupled to the server for identifying geographically significant components of said construction components; and

storing means coupled to the server for storing cross-references between said geographically significant components and geographic locations in a storage.

37. (previously amended) The apparatus of claim 36, wherein the validating means further comprises:

determining means to perform a first geographic determination for the network address based on a determined geographical location for the domain name returned in the trace route;

the determining means to perform at least one alternate geographic determination for the network address based on at least one alternate determined geographic location for at least one additional domain name returned from the trace route; and

selection means to return a validated geographic location of the client selected from either the first geographic location determination or one of the at least one alternate determined geographic location determinations.

Art Unit: 2142

38. (currently amended) An apparatus for determining a geographic location for a network address, comprising:

a network comprising a plurality of devices, the devices including a plurality of client nodes;

~~a server communicatively coupled to the a network, wherein a plurality of client nodes reside on the network;~~

receiving means for receiving a trace route comprising first and second network host identifiers for hosts disposed between a the server and a client being one of the plurality of client nodes on a network;

matching means for matching the first network host identifier to a first template;

parsing means for first parsing the first network host identifier according to the first template to determine a first geographically significant component of the first network host identifier; wherein the geographically significant component is derived from a construction format of the network host identifier ,where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network host, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network host is assigned;

identifying means for identifying an estimated geographic location for the client based at least in part on said first parsing;

the matching means for matching the second network host identifier to a second template;

the parsing means for second parsing the second network host identifier according to the second template to determine a second geographically significant component of the second host identifier;

revision means for revising said estimated geographic location based at least in part on said second parsing; and

storing means for storing said estimated geographical location in a storage coupled to the server.

39. (canceled)

40. (original) The apparatus of claim 38, further comprising:



revising means for revising said estimated geographic location based at least in part on a client profile associated with the client.

41. (currently amended) An apparatus for determining a geographic location, comprising:

a network comprising a plurality of devices, the devices including a plurality of client nodes;

a web server communicatively coupled to the a network, ~~wherein a plurality of client nodes reside on the network;~~

creating means for creating a log comprising network addresses of one or more clients of the plurality of client nodes that have communicated with the web server;

filtering means for filtering the log so as to remove undesirable network addresses;

asynchronous tracing means for asynchronously performing a trace route between a first one of said filtered network addresses and the server regardless of whether a previous geographic location for the first one of said filtered network addresses had been determined;

analyzing means for analyzing a result of said asynchronous performed trace route and for ascertaining a geographically significant component of at least one network address between a first one of said filtered network addresses and the server; wherein the geographically significant component is derived from a construction format of the network address, where the construction format comprises a first portion including port and device data for network equipment utilized to host a particular network address, a last portion identifying a particular backbone provider, and a middle portion comprising a reference to a nearest airport to a device to which the particular network address is assigned;

determining means for determining a geographic location for said first one responsive to said analyzing; and

storing means for storing the geographical location in a storage coupled to the web server.

42. (original) The apparatus of claim 41, further comprising:

generating means for generating a report comprising geographic locations for clients that have communicated with the web server.

43. (original) The apparatus of claim 41, wherein said determining means for determining the geographic location comprises:

matching means for matching the result against a template identifying geographically significant portions of network addresses formatted in compliance with the template.

44. (previously presented) The method of claim 1, wherein identifying a geographically significant component of the domain name and network address comprises:

performing one of lexical analysis or pattern matching on the domain name and the text based network address to match against known formats; and

selecting a likely geographically significant component using a deductive algorithm to analyze the domain name and text based network address.

45. (previously presented) The method as recited in claim 44, wherein the deductive algorithm comprises one of an expert system or rule based system.

46. (previously presented) The apparatus of claim 18, wherein identifying a geographically significant component of the domain name and network address comprises:

determination component for performing one of lexical analysis or pattern matching on the domain name and the text based network address to match against known formats; and

selection component for selecting a likely geographically significant component using a deductive algorithm to analyze the domain name and text based network address.

47. (previously amended) The apparatus as recited in claim 46, wherein the deductive algorithm comprises one of an expert system or rule based system.

48. (previously presented) The apparatus of claim 25, wherein determining a geographically significant component of the domain name and network address comprises:

determination component for performing one of lexical analysis or pattern matching on the domain name and the text based network address to match against known formats; and

selection component for selecting a likely geographically significant component using a deductive algorithm to analyze the domain name and text based network address returned from the parsing.

49. (previously amended) The apparatus as recited in claim 48, wherein the deductive algorithm comprises one of an expert system or rule based system.

50. (previously presented) The method of claim 14, wherein analyzing a result of said asynchronous performed trace route further comprises:

selecting a first and second network address in the trace route;

performing a reverse address lookup of the first and second network address and the first one of said filtered network addresses, the first one of said filtered network addresses corresponding to a client, the performing to derive a first and second text based network address and client text based network address;

performing one of lexical analysis or pattern matching on the first and second text based network address and the client text based network address to match against known formats; and

selecting a likely geographically significant component for each text based network address using a deductive algorithm to analyze the text based addresses; and

returning the likely geographically significant components for use in the determining a geographic location for the client.

***Reasons For Allowance***

The following is an examiner's statement of reasons for allowance: The current claim amendments in this Examiner's Amendment overcome the rejections based on 35 USC section 101 presented in the office action mailed on 11/14/2007. The claims are allowable over the prior art for the reasons indicated in the 11/14/2007 office action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS B. BLAIR whose telephone number is (571)272-3893. The examiner can normally be reached on 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Douglas B Blair/  
Primary Examiner, Art Unit 2142